# OIPE CONTENTAL PROPERTY OF TRADELERS

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/672,991

Applicant

Edward F. Stephens

Filed

September 26, 2003

Title

Laser Diode Packaging

TC/A.U.

Not Assigned

Examiner

Not Assigned

Docket No.

47080-00029USD1

Customer No.

30223

### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on December 18, 2003.

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

ignature: Amet L.Y.

Janet L. Newmake

# INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 AND 1.98

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered, and the references listed on enclosed Form PTO-1449 be considered by the Examiner and made of record. In accordance with 37 C.F.R. § 1.98(d), copies of the listed references are not enclosed as they were submitted by the Applicant or cited by the Examiner for parent Application No. 09/280,783.

In accordance with 37 C.F.R. §§ 1.97(g) and (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, or an admission that the information disclosed is, or is considered to be, prior art with respect to the present application or material to patentability, as defined in 37 C.F.R. § 1.56.

This Information Disclosure Statement is being filed within three months of the filing date of this application and, hence, is believed to be timely in accordance with 37 C.F.R. § 1.97(b). Accordingly, no fee is believed to be due. Should any fee be deemed necessary (except payment of the issue fee), however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 10-0447 (47080-00029USD1). A duplicate copy of this Statement is enclosed for that purpose.

Respectfully submitted,

Date: December 18, 2003

Daniel J. Burnham Reg. No. 39,618 Jenkens & Gilchrist

225 West Washington Street, Suite 2600

Chicago, IL 60606-3418

(312) 425-3900

Attorney for Applicant

Sheet 1 of 4

LIST OF PRIOR ART CITED BY APPLICANT

Application No.:

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First Named Inventor:

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Group Art Unit:

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Examiner:

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Attorney Docket No.:

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	U.S. PATENT DOCUMENTS						
Examiner Initial	Ref.	Document Number	Date	Name	Class	Sub/ Class	Filing Date (i Application)
	Al	3,303,432	02/07/1967	Garfinkel et al.	331	94.5	
	A2	3,339,151	08/29/1967	Smith			
	A2	3,590,248	06/29/1970	Chatterton Jr.			
	A3	3,654,497	04/04/1972	Dyment et al.	372	8	
	A4	3,771,031	11/06/1973	Kay			
	A5	3,802,967	04/09/1974	Ladany et al.	438	479	
	A6	3,896,473	07/22/1975	DiLorenzo et al.	372	36	
	A7	3,958,263	05/18/1976	Panish et al.	372	45	
	A8	3,962,655	06/08/1976	Selway et al.			
	A9	4,092,614	05/30/1978	Sakuma et al.	331	94.5	
	A10	4,315,225	02/09/1982	Allen, Jr. et al.			
	A11	4,383,270	05/10/1983	Schelhorn	357	71	
	A12	4,393,393	07/12/1983	Allen, Jr. et al.	357	81	
	A13	4,454,602	06/12/1984	Smith			
	A14	4,573,067	02/25/1986	Tuckerman et al.	357	82	
	A15	4,617,585	10/14/1986	Yasui	357	72	
	A16	4,716,568	12/29/1987	Scifres et al.			
	A17	4,730,324	03/08/1998	Azad			
	A18	4,831,629	05/16/1989	Paoli et al.			
	A19	4,847,848	07/11/1989	Inoue et al.			
	A20	4,877,641	10/31/1989	Dory	427	38	
	A21	4,881,237	11/14/1989	Donnelly	372	50	
	A22	4,899,204	02/06/1990	Rosen et al.	357	30	
	A23	4,901,330	02/13/1990	Wolfram et al.			
<u> </u>	A24	4,949,346	08/14/1990	Kuper et al.			

DATE CONSIDERED

**EXAMINER** 

<sup>\*</sup>Examiner: Initial if citations considered, whether or not citation is in conformation with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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# **U.S. PATENT DOCUMENTS (continued)**

Examiner Initial	Ref.	Document Number	Date	Name	Class	Sub/ Class	Filing Date (if Application)
	A25	4,975,923	12/04/1990	Buus et al.	372	50	
	A26	5,001,355	03/19/1991	Rosen et al.	250	551	
-	A27	5,022,042	06/04/1991	Bradley .			
	A28	5,031,187	07/09/1991	Orenstein et al.	372	50	
	A29	5,040,187	08/13/1991	Karpinski			
-	A30	5,073,838	12/17/1991	Ames	361	103	
	A31	5,084,888	01/28/1992	Taijima et al.			
	A32	5,099,214	03/24/1992	Rosen et al.			
	A33	5,099,488	03/24/1992	Ahrabi et al.	372	361	
	A34	5,105,429	04/14/1992	Mundinger et al.	372	34	
	A35	5,115,445	05/19/1992	Mooradian			
	A36	5,128,951	07/07/1992	Karpinski			
	A37	5,156,999	10/20/1992	Lee	437	215	
-	A38	5,163,064	11/10/1992	Kim et al.	372	50	
	A39	5,212,699	05/18/1993	Masuko et al.	372	34	
	A40	5,216,263	06/01/1993	Paoli	257	88	
	A41	5,216,688	06/01/1993	Kortz et al.	372	75	-
	A42	5,284,790	02/08/1994	Karpinski			
	A43	5,287,375	02/15/1994	Fujimoto	372	38	
	A44	5,305,344	04/19/1994	Patel		1	
	A45	5,311,535	05/10/1994	Karpinski			
	A46	5,311,536	05/10/1994	Paoli et al.			
	A47	5,323,411	06/21/1994	Shirasaka et al.	372	43	
	A48	5,325,384	06/28/1994	Herb et al			
	A49	5,337,325	08/09/1994	Hwang	372	36	
EXAMINE	R	4-3		DATE CONSIDERED	•		

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# **U.S. PATENT DOCUMENTS (continued)**

Examiner			_			Sub/	Filing Date (if
<u>Initial</u>	Ref.	Document Number	Date	Name	Class	Class	Application)
	A50	5,351,259	09/27/1994	Ishimori et al.			
	A51	5,388,755	02/14/1995	Baxter			
	A52	5,394,426	02/28/1995	Joslin			
	A53	5,394,427	02/28/1995	McMinn et al.	372	70	
	A54	5,402,436	03/28/1995	Paoli			
	A55	5,402,437	03/28/1995	Mooradian			
	A56	5,438,580	08/01/1995	Patel et al.			
	A57	5,485,482	01/16/1996	Selker et al.		1.5	
	A58	5,526,373	06/11/1996	Karpinski			
	A59	5,663,979	09/02/1997	Marshall	372	103	
	A60	5,764,675	07/11/1996	Juhala			
	A61	5,835,518	11/10/1998	Mundinger et al.	372	50	
	A62	5,898,211	04/27/1999	Marshall et al.	257	601	
	A63	5,987,043	11/16/1999	Brown et al.	372	36	
	A64	6,352,873	03/05/2002	Hoden	438	28	
			FOREIGN	PATENT DOCUMENTS	<u> </u>	1	
Examiner Initial	Ref.	Document Number	Date	Country	Class	Sub/ Class	Translation Yes/No
-	Bl	JP 55-65450	05/1980	Japan	257	675	Yes
-	B2	JP 59-067639	06/04/1984	Japan	H01S	3/18	Abstract
	В3	JP 3-269325	11/1987	Japan	257	625	Yes
	B4	ЛР 2-281782	11/19/1990	Japan			
	B5	JP 3-6875	01/14/1991	Japan	H01S	3/18	Abstract
	В6	JP 4-023381	01/27/1992	Japan	H01S	3/18	Abstract
	В7	ЛР 4-359207	12/11/1992	Japan	H01S	3/18	Abstract
EXAMINE	R			DATE CONSIDERED			

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# FOREIGN PATENT DOCUMENTS

Examiner Initial	Ref.	Document Number	Date	Country	Class	Sub/ Class	Translation Yes/No
	В8	JP 6-13717	01/21/1994	Japan	H01S	3/18	Abstract
	В9	EP 0 458 469 A1	11/27/1991	Europe	257	675	Yes
	B10	EP 0 550 996 A1	01/09/1992	Europe	H01S	3/025	
	B11	EP 0 634 822 A1	01/18/1995	Europe	H01S	3/00	
	B12	EP 0 805 527 A2	11/05/1997	Europe	H01S	3/025	
	B13	EP 0 833 419 A1	04/01/1998	Europe	H01S	3/43	

Ref.	Document Information				
Cl	Coherent Laser Group, Laser Diodes	and Bars, 5 pages (no date)			
C2	Endriz et al., "High Power Diode Las (April 1992)	er Arrays," IEEE J. Quantum Electronics, Vol. 28, No. 4, pp. 952-965			
C3	IBM Technical Disclosure Bulletin, V	Vol. 31, No. 12, pp. 5-7 (May 1989)			
C4	IBM Technical Disclosure Bulletin, V	Vol. 31, No. 6, pp. 372-373 (November 1988)			
C5	Thomson/CSF Semiconducteurs Spec	ifiques, Package Specification (schematic), p. 3 (no date)			
C6	Patent Abstracts of Japan, Vol. 15, N	Abstracts of Japan, Vol. 15, No. 54, 2 pages (February 8, 1991)			
C7	Anonymous, "Thermal Spacer For Room Temperature Close Packed GaAs Laser Arrays," IBM Technical Disclosure Bulletin, Vol. 12, No. 12, 1 page (May 1970)				
C8	Mundinger, D., et al., "High Average Power Edge Emitting Laser Diode Arrays On Silicon Microchannel Coolers," Applied Physics Letters, Vol. 57, No. 21, pp. 2172-2174 (November 19, 1990)				
	C1 C2 C3 C4 C5 C6 C7	C1 Coherent Laser Group, Laser Diodes C2 Endriz et al., "High Power Diode Las (April 1992) C3 IBM Technical Disclosure Bulletin, V C4 IBM Technical Disclosure Bulletin, V C5 Thomson/CSF Semiconducteurs Spec C6 Patent Abstracts of Japan, Vol. 15, N C7 Anonymous, "Thermal Spacer For Ro Disclosure Bulletin, Vol. 12, No. 12, C8 Mundinger, D., et al., "High Average			

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